

CLAIMS

What is claimed is:

1. A kimchi refrigerator, comprising:
 - a cabinet to define an external appearance of the kimchi refrigerator, the cabinet having a storage compartment to store food, the storage compartment being opened at a top thereof to form an opening and being cooled by cooling elements;
 - a lid hinged to a predetermined portion of the cabinet to selectively close the opening of the cabinet; and
 - a hinge unit to hinge the lid to the predetermined portion of the cabinet, with first and second cam units included at corresponding ends of the hinge unit to mount to both sides of the lid to rotatably open or close the lid.
2. The kimchi refrigerator according to claim 1, wherein the hinge unit comprises:
 - a hinge casing having a longitudinal open hinge channel at each end thereof to mount the first and second cam units to both ends of the hinge casing; and
 - a hinge cap disposed at each end of the hinge casing to cover the open hinge channel, thus preventing each of the first and second cam units from being removed from the hinge channel.
3. The kimchi refrigerator according to claim 2, wherein each of the first and second cam units comprises:
 - a stationary cam having a hinge projection at a first end thereof, and having a cam part at a second end thereof, the hinge projection passing through the hinge cap to be mounted to the lid and the cam part having an irregular form that is generally cylindrical shape with twisted troughs;
 - a movable cam having a plurality of cam projections at a first end thereof to correspond to the irregular form of the cam part; and
 - an elastic member to elastically bias a second end of the movable cam, thus allowing the movable cam to be retractably set in the hinge channel according to the interaction between the cam part having the irregular form and the cam projections of the movable cam.

4. The kimchi refrigerator according to claim 2, further comprising:
seating recesses formed at both sides of a rear end of the lid to correspond to a shape of the hinge projections, thus allowing the hinge projections to be seated in the seating recesses, respectively; and
a cover member mounted to the lid to cover each of the seating recesses, thus allowing each of the hinge projections to be installed between the seating recesses and the cover member.
5. A refrigerator comprising:
a cabinet housing a plurality of refrigeration components and a climate controlled food storage compartment that includes an opening selectively covered by a lid; and
a single hinge unit coupling the cabinet and the lid.
6. The refrigerator as in claim 5, wherein the single hinge unit further comprises
a hinge casing adapted to mount cam units at opposite ends of the hinge; and
a pair of hinge caps that restrain the cam units in the hinge casing.
7. The refrigerator as in claim 6, wherein the cam units each include
a stationary cam having a hinge projection passing through the hinge cap at a first end, and having a cam part at the distal end, the hinge projection adapted to be mounted to the lid;
a movable cam operably engaging the cam part; and
a biasing member to place the movable cam under tension.
8. The refrigerator as in claim 7, wherein the lid has seating mounts at opposite corners of one edge of the lid adapted to fit the stationary cams.
9. The refrigerator as in claim 8, further comprising cover members attached to the lid to couple the hinge unit to the lid.
10. The refrigerator as in claim 7, wherein the biasing member includes an elastic member to elastically bias the movable cam by allowing the movable cam to be retractably set in the hinge channel according to the engagement between the cam part and the movable cam.

11. A kimchi refrigerator comprising:
a cabinet housing a plurality of refrigeration components and a climate controlled food storage compartment having an opening;
a single hinge unit casing having a pair of cam units at each end attached to the cabinet;
a lid having a pair of retention seats for coupling with the cam units so as to rotate to cover the opening; and
a pair of covers for retaining the cam units in the retention seats.
12. The kimchi refrigerator as in claim 11, wherein of the cam units each include
a stationary cam having a hinge projection at a first end, and having a cam part at the opposite end; and
a movable cam operably engaging the cam part.
13. The kimchi refrigerator as in claim 12, wherein the movable cam is placed under tension by an elastic member.
14. A hinged storage compartment comprising:
a cabinet housing that includes an opening selectively covered by a lid; and
a single hinge unit coupling the cabinet and the lid.
15. The hinged storage compartment as in claim 14, wherein the single hinge unit further comprises
a hinge casing adapted to mount a cam units at opposing ends of the hinge casing; and
a pair of hinge caps that restrain the cam units in the hinge casing.
16. The hinged storage compartment as in claim 15, wherein the cam units each include
a stationary cam having a hinge projection passing through the hinge cap at a first end, and having a cam part having a generally cylindrical shape defining a plurality of curved troughs at the distal end, the hinge projection adapted to be mounted to the lid;
a movable cam having a plurality of projections operably engaging the curved troughs of the cam part; and

an elastic biasing member to place the movable cam under tension to elastically bias the movable cam by allowing the movable cam to be retractably set in the hinge channel according to the engagement between the cam part and the movable cam.